LOCAL OPERATING PROCEDURE

Approved by Quality & Patient Care Committee
21 June 2018

RETAINED PLACENTA - Management

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM

- Delivery of placenta and membranes by 90 minutes of third stage of labour
- Prevention of postpartum haemorrhage (PPH)

2. PATIENT

- Woman with third stage of labour not completed by 30 minutes, following a vaginal birth

3. STAFF

- Medical, nursing and midwifery staff

4. EQUIPMENT

- 16 gauge intravenous (IV) cannula
- Indwelling urinary catheter (IDC)
- 1L sodium chloride 0.9% bag (Normal Saline) containing 40 units of oxytocin (Syntocinon)

5. CLINICAL PRACTICE

- Convert to active management of the 3rd stage in a woman who chooses physiological management of the 3rd stage if the placenta is not delivered in 30 minutes
- Initiate the following from 15 minutes (in woman who has had active management of 3rd stage) if the placenta has not yet delivered:
    - Insert 16 gauge IV cannula, send full blood count (FBC) and group and hold (G&H)
    - Commence 1L sodium chloride 0.9% with 40 units oxytocin (Syntocinon) at rate of 250ml/hr
    - Insert IDC
    - Re-attempt controlled cord traction (CCT)/Brandt-Andrews manoeuvre to deliver placenta
- Activate Rapid Response System, if placenta is not delivered by 30 minutes of active 3rd stage of labour, to alert medical staff, expedite delivery of the placenta and minimise risk of PPH
- Escalate to Rapid Response System earlier at any stage there is increased vaginal bleeding and/or compromise of the woman
- Book Manual Removal of Placenta (MROP) in Operating Theatre (OT) as 'Urgent to be in OT/Anaesthetic bay by 30mins from PACE' and notify Obstetric Consultant on call
- Coordinate resuscitation under the lead of Anaesthetic Registrar
- Aim for delivery of placenta by 60 minutes from activation of 1st PACE call
- Monitor maternal observations (blood pressure (BP), pulse and respiration rate) every 5 minutes
- Monitor and measure (weigh) blood loss
- Notify blood bank for cross-match of 2 units packed red blood cells if blood loss is >1L
- Perform a coagulation profile (coags)and maintain intravascular volume with IV fluids if blood loss >1L

MROP

- Assess for suitability of performing procedure in Delivery Suite (DS) or moving to Operating Theatre (OT). It is preferable to perform the procedure in the OT
- Consider (if planned in DS):
    - Analgesia/Anaesthesia
    - Consent
    - Hemodynamic stability
    - Expertise
    - Access to adequate equipment, asepsis and lighting

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RETAINED PLACENTA – Management cont'd

- Perform under adequate anaesthesia in OT
- Assess the woman in Anaesthetic Bay for consideration of regional anaesthesia if clinically and haemodynamically stable
- Administer broad spectrum antibiotics:
  - Single dose of Cephazolin 1g IV PLUS Metronidazole 500mg IV
  - If Penicillin allergic, single dose of Clindamycin 600mg IV PLUS Metronidazole 500mg IV
- Perform MROP by credentialed Obstetric Registrar by:
  - Prep and drape in lithotomy position with use of aseptic technique
  - Follow umbilical cord until lower edge of placenta felt, with other hand over fundus for control
  - Separate edge from body of uterus and deliver placenta
  - Ensure uterine cavity feels empty
- Consider placenta accreta if total or part of placenta is very adherent and call Obstetric Consultant to attend
- Give uterotonics to ensure the uterus is well contracted:
  - Continue 1L sodium chloride 0.9% with 40 units oxytocin (Syntocinon) at rate of 250ml/hr
  - Ergometrine IV 250mcg and IM 250mcg
  - Misoprostol 800mcg PR
  - PGF2-alpha by intramyometrial injection
- Consider placement of Cook Bakri Uterine Tamponade balloon if ongoing bleeding and adequate uterotonics have been given

Postpartum Care

- Keep patient warm
- Maintain urine output of >30ml/hr
- Ensure uterus remains firm, central and well contracted
- Collect FBC and Coagulation studies if PPH >1L
- Recommend Acute Care Centre bed if PPH >1L

6. DOCUMENTATION

- Integrated clinical notes
- ObstetriX
- Operative notes
- Partogram
- Medication chart
- Fluid balance and fluid order charts

7. EDUCATIONAL NOTES

- According to World Health Organisation (WHO), retained placenta is diagnosed when the placenta is not expelled within 30 minutes of delivery of the baby. The incidence of retained placenta is 3.3% with this definition. The median duration of the third stage is 6 minutes. The incidence of PPH significantly increases after 30 minutes of the third stage of labour
- Retrospective data from RHW deliveries show that PPH >1L occurred 38% with retained placenta whereas PPH >1L occurred 3.5% without retained placenta (i.e. relative risk of PPH >1L with retained placenta was 10-11 times greater)
- The frequency of retained placenta is increased in preterm delivery (gestation <37 weeks) and markedly increased in very preterm delivery (gestation <27 weeks)
- The use of oxytocin as part of the active management of the third stage of labour has been shown to diminish bleeding in the third stage. However, once the diagnosis of retained placenta has been made, no pharmacological treatment has been shown to be effective and immediate manual removal of placenta should be considered

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RETAINED PLACENTA – Management cont'd

- There are currently no randomised controlled trials evaluating the efficacy of antibiotic prophylaxis to prevent endometritis after MROP with a vaginal delivery. The WHO recommend giving single dose of antibiotics with MROP (Ampicillin 2g IV OR Cephazolin 1g IV PLUS Metronidazole 500mg IV). The basis for this recommendation are that the antibiotics recommended cover aerobic and anaerobic flora commonly seen in the genital tract, are widely available, are inexpensive and safe and are used only at the time of the procedure to reduce the bacterial load

8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP

- Third Stage Management Following Vaginal Birth
- Postpartum Haemorrhage - Prevention and Management
- Preterm Labour - Diagnosis and Management
- Balloon Placement for Uterine Tamponade
- Massive Transfusion in OG (Code Pink)
- Massive Transfusion Protocol (POW)
- PACE Management of the Deteriorating Adult Inpatient

9. RISK RATING

- Medium

10. NATIONAL STANDARD

- CC – Comprehensive Care

11. REFERENCES

1 World Health Organisation Guidelines for the management of postpartum haemorrhage and retained placenta. 2012.
2 Chongsomchai C, Lumbiganon P, Laopaiboon M. Prophylactic antibiotics for manual removal of retained placenta in vaginal birth (Review). The Cochrane Collaboration 2011.
3 Combs CA, Laros RK Jr. Prolonged third stage of labour: Morbidity and risk factors. Obstet Gynecol (1991); 77:863-867.
4 Royal Hospital for Women ObstetriX Data from 2008-2014
5 Duffy J, Mylan S, Showell M, Wilson M, Khan K. Pharmocologic Intervention for Retained Placenta: A Systematic Review and Meta-Analysis. Obstetrics & Gynecology 2015 March 125(3); 711-718.
6 Nardin JM, Weeks A, Carroli G. Umbilical Vein Injection for Management of Retained Placenta. Cochrane Database Systematic Review. 2011 May.
7 World Health Organisation Managing Complications in Pregnancy and Childbirth: A guide for midwives and doctors. 2nd Edition, 2017.

REVISION & APPROVAL HISTORY

Amended August 2019 – changed PACE to CERS
Reviewed and endorsed Maternity Services LOPs 19/6/18
Approved Quality & Patient Safety Committee 19/11/15
Reviewed and endorsed Maternity Services LOPs group November 2015
Approved Patient Care Committee 6/12/07
Endorsed Maternity Services Clinical Committee 11/9/07

FOR REVIEW : JUNE 2021

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Management of Retained Placenta – Flowchart

If placenta not delivered yet, initiate the following **at 15 minutes** from active third stage of labour:

- Insert 16G IV cannula, send FBC, G and H
- Commence 1L Normal saline with 40 units Syntocinon at 250ml/Hr
- Insert IDC
- IV Fluid
- Re-attempt Delivery of placenta with CCT/Brandt-Andrews Manoeuvre
- Escalate to rapid response system at any stage if increased vaginal bleeding or haemodynamic concern

From 15 mins

Retained placenta diagnosed
(placenta not delivered by 30 minutes of third stage of labour)

At 30 mins

Activate rapid response system

Obstetric Registrar to:

- Re-attempt delivery of Placenta
- If unsuccessful, book MROP:
  - in OT as "Urgent to be in OT/Anaesthetic bay by 30mins from CERS"
  - Notify Obstetric Consultant on call
  - Anaesthetic Registrar to Coordinate resuscitation

- **Aim for delivery of placenta by 60 minutes from activation of Patient with Acute Condition for Escalation (CERS) call (90 mins from birth)**
- Monitor maternal observations every 5 minutes
- Monitor and measure (weigh) blood loss
- If blood loss is >1L, notify blood bank for cross match of 2 units PRBC, perform coagulation profile, maintain intravascular volume with IV fluids

In OT by 30 mins from CERS (60 mins from Birth)

MROP in OT:

- Regional anaesthesia may be attempted if clinically and haemodynamically stable (assess in anaesthetic bay)
- Prep and drape, aseptic technique
- Follow umbilical cord until lower edge of placenta felt
- Separate edge from body of uterus and deliver placenta
- Ensure uterine cavity feels empty
- If very adherent, consider placenta accreta and call Obstetric Consultant to attend
- Examine placenta/membranes, send to histopathology
- Give uterotonics to ensure uterus well contracted
- Administer broad spectrum antibiotics in OT as single dose of:
  - Cephazolin 1g IV PLUS Metronidazole 500mg IV
  - OR Clindamycin 600mg IV PLUS Metronidazole 500mg IV if allergic to penicillin

Deliver Placenta

By 60 mins from CERS (90 mins from Birth)

Postpartum Care:

- Keep patient warm
- Maintain urine output >30ml/hr
- Ensure uterus remains firm, central and well contracted
- Send FBC and Coags if PPH >1L
- Consider Acute Care ward bed if PPH >1L